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Subject: SAP for Richardson Flats

After reviewing the October 24, 2000 Sampling and Analysis Plan for the Richardson Flats site, and re-reading my comments on the draft RI/FS workplan from almost one year ago, I have to wonder what the authors have been doing for an entire year. It doesn't appear that my comments from last year were actually given any consideration. Is it possible that there were additional documents (e.g, a final RI/RS workplan) in the interim which I didn't see that may have addressed my points?

In my comments on the Draft RI/RS workplan, my major concern was that the current/ future human and ecological receptors who might come into contact with the site contamination were never defined. Without such a discussion (usually shown graphically as a site conceptual model), it is not possible to determine if the types and locations of samples proposed in this SAP are adequate. My recommendation would be to reject this SAP until that information is provided.

Other thoughts:

- ✓ • Section 2.3, Project Task Description does an incredibly poor job of attempting to define the objectives of the investigation. For example, the first objective is to collect soil, sediment and water samples to further characterize site conditions. Clear as mud. It would be helpful to know *why* they want to characterize site conditions. Who or what are they trying to protect here? I especially like the 3rd objective, "Evaluate existing data to determine the need for further data collection". If you have no framework for knowing how useful the existing data is, how in the world are you going to decide you need to collect additional data? Enough said.
- ✓ • I couldn't find any discussion of off-site soil sampling in the text of the SAP, yet Figure 6.0 shows some off-site soil sampling locations. Is off site soil sampling to be done? If so, this should be discussed in the text along with the rationale for doing so, the rationale for the sampling locations, and the metals to be analyzed for.
- ✓ • Page 18, Soil Cover Sampling - The first paragraph states that if the samples contain levels of lead greater than 500 ppm or arsenic greater than 250 ppm then additional analytes will be measured. The rationale for this escapes me. Obviously there appears to be a concern for metals other than lead and arsenic on the site. If this is so, then the soil samples should be analyzed for all metals, not just lead and arsenic. Without a site conceptual model, it is easy to forget that you have ecological concerns at this site.
- ✓ • The SOPs for surface soil sampling in the Appendices propose to collect a bulk fraction sample and homogenize it prior to analysis. For human health risk assessment purposes, we need to see the bulk sample sieved to < 250 microns, and the <250 fraction analyzed for metals (no homogenization!).